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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

04/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/522,359	Applicant(s) HAMAD ET AL.	
	Examiner Lawrence D. Ferguson	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,8,18,20-27,29 and 31-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,8,18,20-27,29 and 31-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Request for Continued Examination

1. This action is in response to the Request for Continued Examination filed February 24, 2009. Claims 1, 8, 18, 24, 31 and 39 were amended, and claim 44 was added, rendering claims 1-3, 6, 8, 18, 20-27, 29 and 31-44 pending in this case.

New Matter - 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 6, 8, 18, 20-27, 29 and 31-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 1, 18, 25, the phrase 'spaced crack-arresting islands that impede crack propagation' is not supported by the specification. Additionally, in claim 44, the phrase, 'crack-arresting islands that impede crack propagation and fracturing in said web without adversely affecting the modulus of elasticity and tensile strength' is not supported by the specification.

Claim Rejections – 35 USC § 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6, 8, 18, 20-27, 29 and 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gentile et al. (U.S. 3,879,257).

Gentile discloses a cellulose papermaking fiber network web (column 5, lines 21-24 and column 9, lines 34-56) where at least one side of the web has bonding material, such as a latex blend or acrylonitrile butadiene, disposed part way through the web (impregnated) in a spaced apart pattern (column 5, lines 35-45, column 6, lines 18-32 and column 15, lines 1-5, 26-36). Gentile discloses about 3 percent of the bonding material is needed to impregnate the web (column 15, lines 39-50). Figures 5 and 6 show the geometrical formations define a plurality of discrete areas distributed over a web. Because Gentile discloses a cellulose fiber network web and 3% of polymer material impregnating the web in discontinuous geometrical formations, it would have been obvious to one of ordinary skill in the art for the impregnated material to form spaced crack-arresting islands that impede crack propagation in the web to give a uniform surface, as in claims 1, 3, 6, 18, 25, 29, 32.

Concerning claims 2, 20 and 26, Gentile discloses the bonding material can be a latex blend or acrylonitrile butadiene (column 15, lines 1-5, 26-36), which are thermoplastic materials.

Concerning claims 8, 31 and 39, bonding material is also added to the second surface of the web, where it appears the subsequent bonding material is distinct from the first bonding material, as Gentile does not disclose both bonding materials are made of the same polymeric material.

Concerning claims 21, 33 and 43, Gentile discloses the cellulosic fibers are pulp fibers (column 9, lines 35-49).

Concerning claims 22 and 34, the bonding material is applied in a recticular pattern (column 14, lines 36-40).

Concerning claims 23, 27 and 35, Figure 5 shows equi-distant circle geometrical formations.

Concerning claims 24 and 36, Figure 6 shows diamond-shaped geometrical formations.

Concerning claims 37-38, the phrase, "wherein the paper or board is calendered" introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given little patentable weight in product claims.

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Concerning claims 40-42, Gentile discloses printing the web (column 22, lines 3-6).

Concerning claim 44, Gentile discloses a cellulose papermaking fiber network web (column 5, lines 21-24 and column 9, lines 34-56) where at least one side of the web has bonding material, such as a latex blend or acrylonitrile butadiene, disposed part way through the web (impregnated) in a spaced apart pattern (column 5, lines 35-45, column 6, lines 18-32 and column 15, lines 1-5, 26-36). Gentile discloses about 3 percent of the bonding material is needed to impregnate the web (column 15, lines 39-50). Figures 5 and 6 show the geometrical formations define a plurality of discrete areas distributed over a web. Because Gentile discloses a cellulose fiber network web and 3% of polymer material impregnating the web in discontinuous geometrical formations, it would have been obvious to one of ordinary skill in the art for the impregnated material to form crack-arresting islands that impede crack propagation in the web without adversely affecting the modulus of elasticity and tensile strength of the paper. In claim 44, the phrase, "for subsequent treatment such as coating and printing" is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts Jr. (U.S. 3,903,342) teaches a fibrous web having first and second surface regions, where each surface region has bonding material disposed only in that region in a spaced apart pattern (abstract).

Becker et al (U.S. 4,158,594) teaches a fibrous sheet having a pattern of raised areas and depressions distributed over each of its surfaces, where bonding material is disposed in the raised areas on one side of the web (column 2, lines 50-68).

Response to Arguments

7. The rejection made under 35 U.S.C. 112, second paragraph, is withdrawn due to Applicants arguments and support for discontinuous geometrical formation forming a uniform paper surface at page 3, lines 10-14, of the instant specification.

Applicant's arguments of the rejection made under 35 U.S.C. 103(a) as being unpatentable over Li et al (U.S. 5,061,545) in view of Lindemann et al (U.S. 3,404,112) are moot based on grounds of new rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-

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272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample, can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lawrence Ferguson/
Patent Examiner, Art Unit 1794

/David R. Sample/
Supervisory Patent Examiner, Art Unit 1794